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U. S. GOVERNMENT IRRIGATION



COME AND SEE THE LAND WHERE
YOU ARE SURE TO HAVE WATER
THE YEAR ROUND

ORLAND GLENN COUNTY
CALIFORNIA

This leaflet is issued by the ORLAND UNIT WATER USERS' ASSOCIATION, the membership of which is made up entirely of the land owners of the Orland Project, and our aim is to acquaint the people with what Orland has to offer to the homeseeker who desires to find a locality where he can establish a home under the most favorable conditions from every standpoint. Having, ourselves come here and established homes, we want more neighbors to share with us our exceptional advantages. We believed in Orland when we decided to locate here and after living here through a few seasons we believe in it still more, for our expectations have been more than fulfilled.

However we will not devote the space at our disposal to a lot of generalities as is so common in circulars of this character, but knowing the questions that were foremost in our own minds we quote them with the answers thereto, given Jan. 7, 1915, by A. N. Burch, the resident engineer of the U. S. Reclamation Service, and manager of the Orland Project, whose position is such that he has absolute knowledge of conditions and can speak as an authority upon any of the questions touched upon.

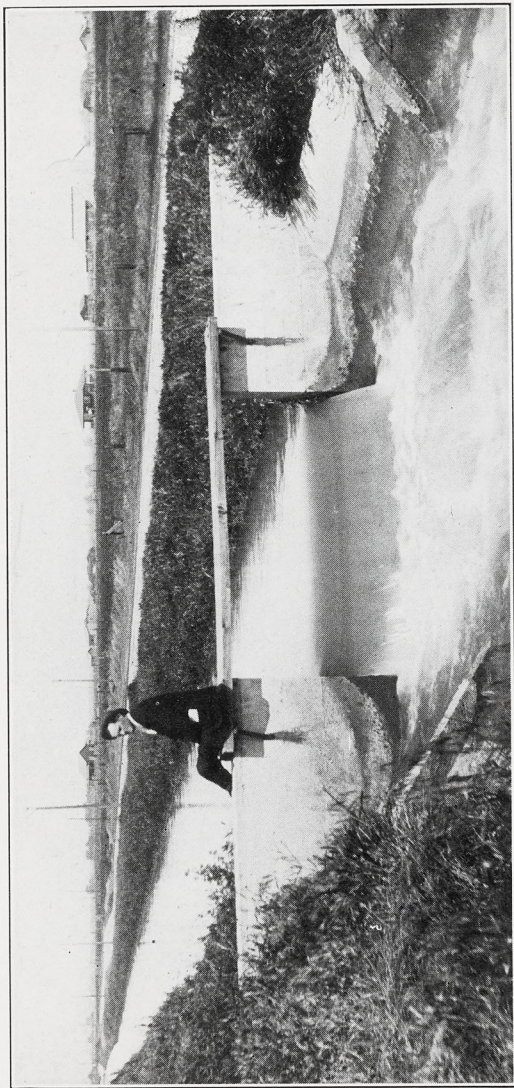
Question 1. How many acres in the Orland project? Quality of land? Its natural adaptability for irrigation? Drainage conditions?

There are 20,000 acres of irrigable land in the Orland Project. The land lies at an elevation of from 200 to 340 feet above sea level and has an average slope of 15 feet to the mile. The land is of good quality, grading in texture through the clay loams, sandy loams, and more or less coarse, gravelly loams; is free from alkali, and well adapted to irrigation. The slope of the land, while sufficient to afford excellent surface drainage, is not so great as to make the distribution of water difficult, and affords an ideal physical condition for successful irrigated farming.

Question 2. * * * Average rainfall
Average rainfall, 17 inches.

Question 3. Capacity of reservoir? Miles of ditches? Class of structures? Reliability of water supply?

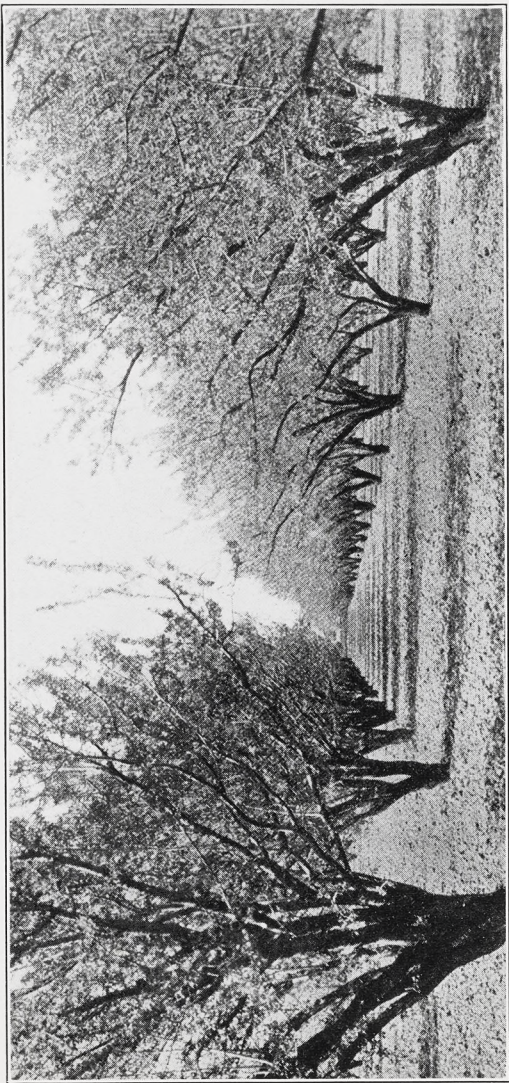
Ditch Scene



The irrigation plan of the project provides for the storage of water in a reservoir controlled by East Park dam, located on Little Stony Creek, about 40 miles southwest of Orland, and a feed canal 7 miles long, with a maximum capacity of 250 second feet, connecting the storage basin with Big Stony Creek: Water is diverted from Stony Creek into the irrigating canals at two points; Miller Buttes, $9\frac{1}{2}$ miles northwest of Orland, for the lands south of Stony Creek, and at a point 5 miles northwest of Orland for the lands on the north side of Stony Creek. The water is conveyed from the reservoir in the natural bed of Stony Creek, 41 miles for the south, and 45 miles for the north side lands. There are 147 miles of canals and laterals in the project, all of which are completed. The capacity of the largest canal is 250 second feet, and of the smallest lateral 10 second feet. There will be a total of 192 miles of natural and artificial channels in use when the land is all under irrigation. There will also be a total of 1,700 structures, 1,620 of which are now completed. Of these 1,683 are built of concrete, and 17 of wood. There have been laid $2\frac{1}{2}$ miles of concrete pipe, and 5 miles of ditches have been lined with concrete. Up to January 1, 1915, 26,100 cubic yards of concrete, and 80 tons of steel were used in building structures. The storage dam is a concrete structure 249 feet long and 139 feet high, with a storage capacity of 51,500 acre-feet. The government reservation at East Park contains 4,000 acres, about 2,000 acres of which are flooded by the stored water. The watershed tributary to the reservoir consists of 102 square miles on Indian and Little Stony Creeks, and 97 square miles on Big Stony Creek. Some of the latter has an elevation of over 6,000 feet and is rarely entirely free from snow. From the best data obtainable it appears that this watershed may always be depended upon for sufficient water to fill the reservoir each year.

Question 4. Total cost of project completed? When will it be completed?

The total estimated cost of the project is \$1,000,000, which will be about equally divided between the cost of the storage works and the



Almond Orchard

cost of the canal and lateral systems. The work will all be completed in 1915, but there will be no work uncompleted at the beginning of the 1915 irrigation season which will interfere with the delivery of water to any of the land which is ready for it.

Question 5. Amount of water available for each acre of land per season?

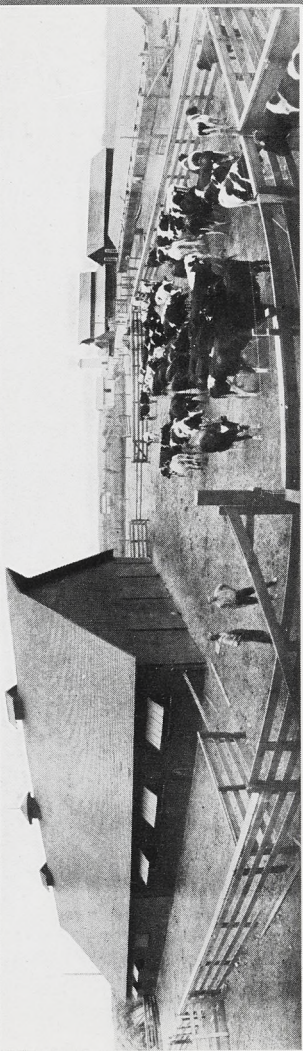
The water supply for the project is drawn from the natural flow of Stony Creek up to June 15, and the stored water is a reserve for use after this date. The gross supply from both sources is about 4.5 acre-feet per acre, or there will be a net supply available for delivery to the land of approximately 3 acre-feet.

Question 6. Cost of water for irrigation per season?

The construction charge will be repaid to the United States in twenty annual installments, as follows: The first four installments each 2 per cent, the next two installments 4 per cent, and the next fourteen installments each 6 per cent of the total construction cost. In addition to these annual installments there will be a charge for operating and maintaining the system, which will be the actual cost of this work to the United States. This charge will be based on a flat rate for all of the irrigable land in the project whether using water or not, and an additional charge per acre-foot for all water in excess of the quantity fixed in the flat rate; so that the amount of the charge each year to the individual water user will depend to a considerable extent on the quantity of water he uses. The total average cost for operation and maintenance per year for the first 5 years may possibly not much exceed \$1 per acre.

Question 7. Number of acres now under irrigation and kind of produce grown?

The total irrigable area of farms using water in 1914 was 8,600 acres, of which 7,364 were actually irrigated, a little over 50 per cent of the land for which the irrigation system was completed. There were 296 farms, with a population of 1,333, or an average of $4\frac{1}{2}$ to the farm. The average area of the farms was 29 acres, of which 25 acres was irrigated.



The Two Creameries and Dairy Herd

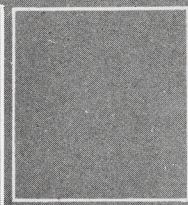
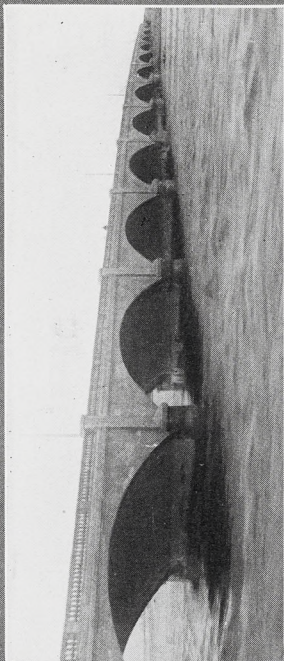
There were 5,800 acres of alfalfa, of which 900 acres were new planting. There were 28,500 tons of alfalfa hay, an increase of 13,200 tons over 1913. There were 88 acres of deciduous, 97 acres of citrus, and 90 acres of almond trees in full or partial bearing and there were 630 acres of non-bearing young orchards of various kinds. All kinds of small fruits and vegetables were grown and there were some quite extensive fields of Kaffir and Indian corn. On January 1, 1915, there were 2,550 head of dairy stock on the irrigated farms, as against 1,380 on January 1, 1914. (Now, June 1, 1915, 3,500 head.) The increased value of live stock and equipment for 1914 was \$85,700, and the total value of these two items on the irrigated farms was \$342,680. The total investment in improvements on the 8,600 acres included in the irrigated farms on January 1, 1915, was \$580,000.

Question 8. When the construction charge is paid will the people own the irrigation system?

Section 6 of the Reclamation Act provides, "that when the payments required by this Act are made for the major portion of the lands irrigated from the waters of any of the works herein provided for, then the management and operation of such works shall pass to the owners of the lands irrigated thereby
* * * "

Question 9. What will be the probable value of the project when completed?

The money value of the project when completed will at least equal the expenditures of the United States, but the economic value will depend largely upon how fully the opportunities offered for the intensive cultivation of the land under the system are taken advantage of by the land owners. Judging from the class of development that has so far taken place, the potential value of the works is great, and without exaggeration may be placed at double their cost to the United States.



Concrete Bridge and Road Scene

WHY ORLAND?

BECAUSE Uncle Sam's fancy Irrigation Project is located here.

BECAUSE our elevation above the valley floor affords excellent drainage.

BECAUSE this elevation affords practical immunity from frost.

BECAUSE nowhere can a greater diversity of crops be brought to so high a state of cultivation.

BECAUSE our crops ripen early and bring fancy prices.

BECAUSE alfalfa produces from five to six crops annually.

BECAUSE we have the best country roads in the state.

BECAUSE Orland is on the main line of railroad connecting San Francisco and Portland, the greatest Pacific sea ports.

BECAUSE our mail and train service is unexcelled.

BECAUSE we have good schools, churches and fraternal organizations.

BECAUSE Orland has attracted settlers of the highest type of citizenship.

BECAUSE we have no Chinese or Japanese settlements.

BECAUSE we have all the comforts of an ideal home to offer you.

BECAUSE Orland is growing rapidly, having doubled its population in the last two years.

BECAUSE the acreage in almonds and olives has more than doubled since January 1, 1915.

BECAUSE Orland is substantial, its business blocks are all of reinforced concrete.

BECAUSE the two creameries in Orland will distribute more than \$200,000.00 among the farmers in 1915.

WHY GOVERNMENT IRRIGATION?

BECAUSE it is the most reliable.
BECAUSE you know what it will
cost annually.

BECAUSE the reservoir is full
and running over every spring.

BECAUSE the works, being constructed of concrete and steel, are indestructible.

BECAUSE the water-right is perpetual and is inseparably attached to the land.

BECAUSE the system inaugurated is the most practical and most satisfactory.

BECAUSE you get an abundance for any and all crops in the driest years as well as in the wet ones.

BECAUSE the title to the works remains vested in the United States government.

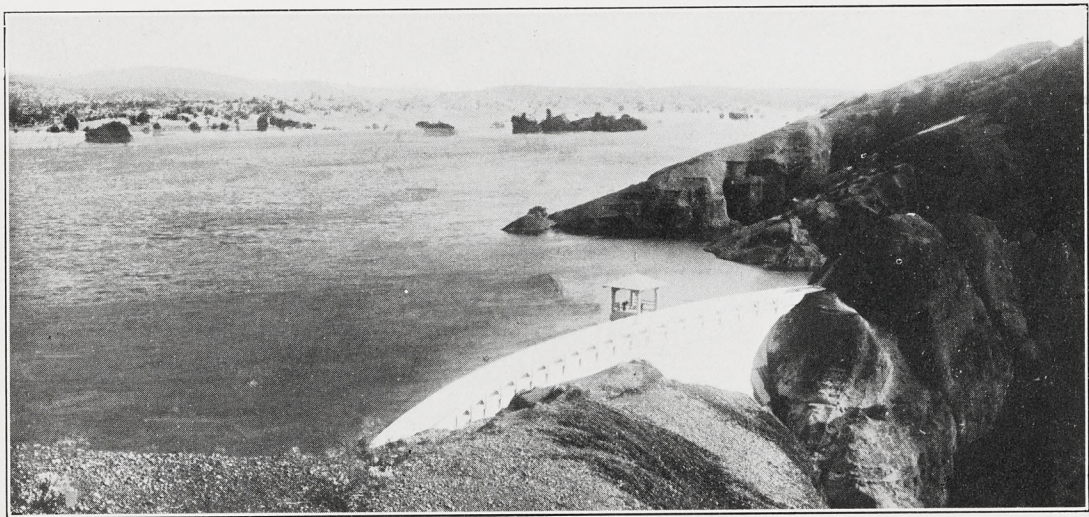
BECAUSE Uncle Sam does not figure on dividends, but asks that only the actual cost be paid back in twenty years, and that without interest.

BECAUSE people prefer to buy under their own (the Government's) control.

This Association respectfully invites you to personally inspect the Project, or to write to it for further facts, and pledges itself to furnish you with information reliable and unbiased.

ORLAND UNIT WATER USERS'
ASSOCIATION

ORLAND, CALIFORNIA



Reservoir and Dam